IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: M. SCHETELIG, et al Serial No.: Not yet assigned

Filed:

October 19, 2001

For:

METHOD AND A DEVICE FOR CONTROLLING DATA EXTRACTION FROM A DATA STREAM CONTAINING AT

LEAST ONE DATA PACKET

Group:

Not yet assigned

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents

October 19, 2001

Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows.

IN THE SPECIFICATION

Please amend the specification as follows:

Page 2, line 1, please insert the following:

-- CROSS REFERENCE TO RELATED APPLICATION

The present application is related to application Serial

No. _____, filed October 19, 2001, entitled

"METHOD AND DEVICE FOR IDENTIFIYING A DATA PACKET IN A DATA STREAM", by M. Schetelig et al --.

Line 1, delete "Description"; insert --Background of the Invention--; and

Line 6, delete "Background of the Invention".

IN THE CLAIMS

Page 17, line 1, delete ``Claims'' insert --What is Claimed is:--.

Please amend the claims as follows:

- 7. (Amended) A device for performing the method for data extraction from a data stream containing at least one data packet as claimed in claim 1, the device comprises:
- a data extraction unit for extracting data from a received data stream,
- a packet detector for comparing a bit stream derived from a received digital data stream with an expected bit sequence to determine a correlation value (CorrVal), and
- a sync-control module receiving the correlation values (CorrVal) from the packet detector that controls the data extraction unit for starting data extraction when the correlation value (CorrVal) exceeds a threshold value (CorrThres).
- 8. (Amended) The device as claimed in claim 7, wherein the device further comprises an initial timing estimator which receives the data stream for determining an initial timing estimate (InitTiming) prior to starting data extraction for synchronizing data extraction with data stream symbols, the

initial timing estimate (InitTiming) is output to the synccontrol module.

- 9. (Amended) The device as claimed in claim 7, wherein the data extraction unit comprises a DC estimator deriving a DC estimate from the received data stream, a comparator for performing a bit decision on the data of the received data stream to derive an oversampled bit stream, the comparator has first and second inputs for receiving the DC estimate from the DC estimator and the data stream, respectively, and a sample-and-hold module for sampling the oversampled bit stream received from the comparator.
- 10. (Amended) The device as claimed in claim 9, wherein the data extraction unit further comprises a timing estimator receiving the oversampled bit stream output by the comparator for tracking the initial timing and for controlling the sample-and-hold module .

Please add new claim 11 as follows:

-- 11. The device as claimed in claim 8, wherein the data extraction unit comprises a DC estimator deriving a DC estimate from the received data stream, a comparator for performing a bit decision on the data of the received data stream to derive an oversampled bit stream, the comparator

has first and second inputs for receiving the DC estimate from the DC estimator and the data stream, respectively, and a sample-and-hold module for sampling the oversampled bit stream received from the comparator. --

IN THE ABSTRACT

Please replace the Abstract of the invention with the attached new Abstract.

REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached page is captioned "Version with markings to show changes made".

Entry of the above amendments prior to examination is respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (1117.40738X00).

Respectfully submitted,

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ABSTRACT

The present invention relates to a method and a device for data extraction from a data stream containing at least one data packet. First, comparing a bit stream derived from a received digital data stream with an expected bit sequence is performed by packet detector to determine a correlation value (CorrVal) for detecting a data packet. Then, a data extraction unit is started for data extraction when the correlation value (CorrVal) exceeds a threshold value (CorrThres) indicating that a data packet has been detected. Therefore, comparing the received bit stream with the expected bit sequence to determine a new correlation value (CorrVal) is continued by the packet detector. Finally, restarting data extraction is initiated by a sync-control module when the new correlation value (CorrVal) exceeds the form correlation value (MaxCorrVal).

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Page 17, line 1, delete "Claims" insert --What is Claimed is:--.

Please amend the claims as follows:

- 7. (Amended) A device for performing the method for data extraction from a data stream containing at least one data packet as claimed in claim 1, the device comprises:
- a data extraction unit (19, 20, 21, 22) for extracting data from a received data stream,
- a packet detector (17) for comparing a bit stream derived from a received digital data stream with an expected bit sequence to determine a correlation value (CorrVal), and
- a sync-control module (23) receiving the correlation values (CorrVal) from the packet detector (17) that controls the data extraction unit (19, 20, 21, 22) for starting data extraction when the correlation value (CorrVal) exceeds a threshold value (CorrThres).
- 8. (Amended) The device as claimed in claim 7, wherein the device further comprises an initial timing estimator (18) which receives the data stream for determining an initial timing estimate (InitTiming) prior to starting data extraction

for synchronizing data extraction with data stream symbols, the initial timing estimate (InitTiming) is output to the sync-control module (23).

- 9. (Amended) The device as claimed in claim 7 or 8, wherein the data extraction unit comprises a DC estimator (19) deriving a DC estimate from the received data stream, a comparator (20) for performing a bit decision on the data of the received data stream to derive an oversampled bit stream, the comparator (20) has first and second inputs for receiving the DC estimate from the DC estimator (19) and the data stream, respectively, and a sample-and-hold module (22) for sampling the oversampled bit stream received from the comparator (20).
- 10. (Amended) The device as claimed in claim 9, wherein the data extraction unit further comprises a timing estimator (21) receiving the oversampled bit stream output by the comparator (20) for tracking the initial timing and for controlling the sample-and-hold module (22).